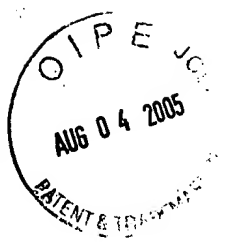


FIG. 1



Draw GD on Image to Generate a
Rough Model & Pose

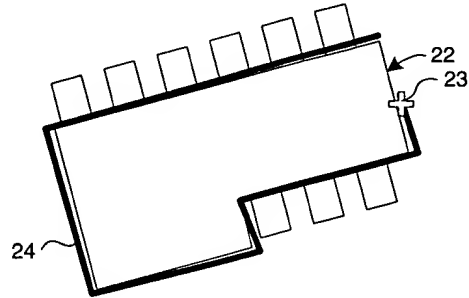


FIG. 2A

Automatically Generate
Vertex Sub-models

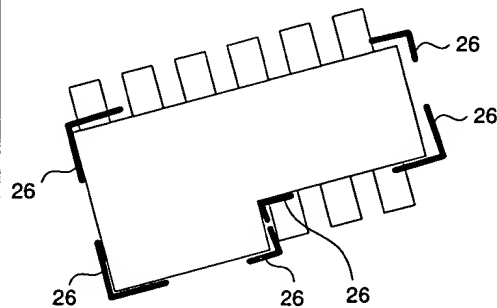


FIG. 2B

Find Poses of
Vertex Sub-models in Image

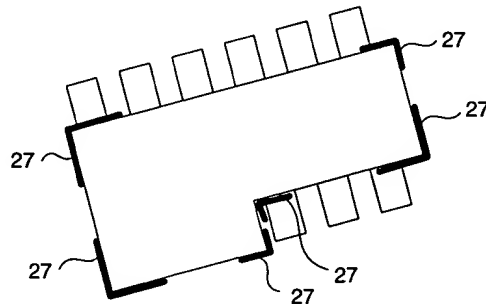


FIG. 2C

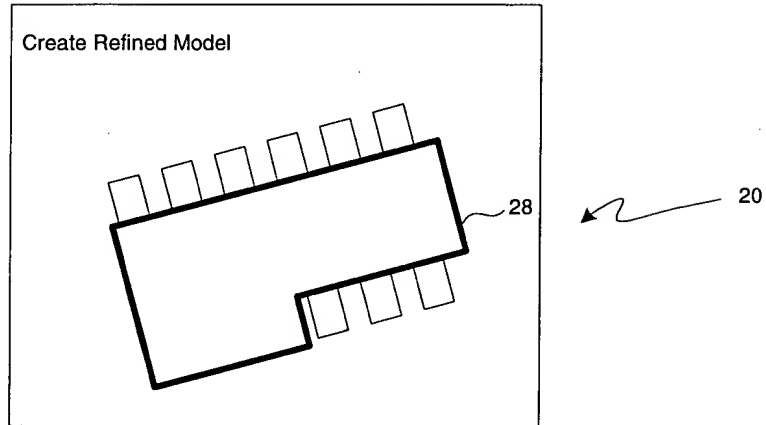


FIG. 2D

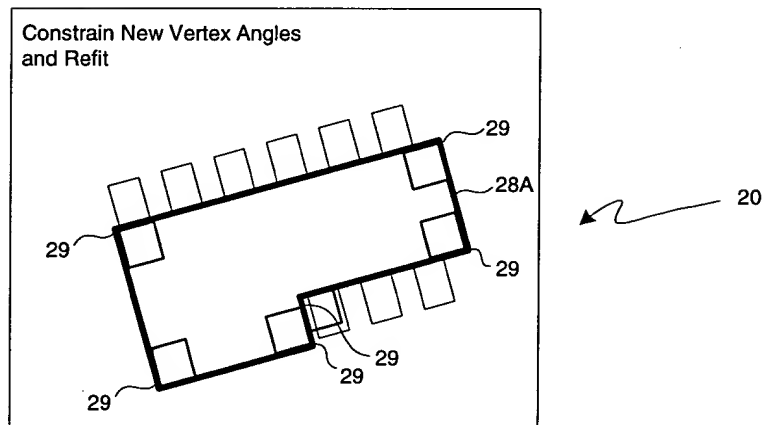


FIG. 2E

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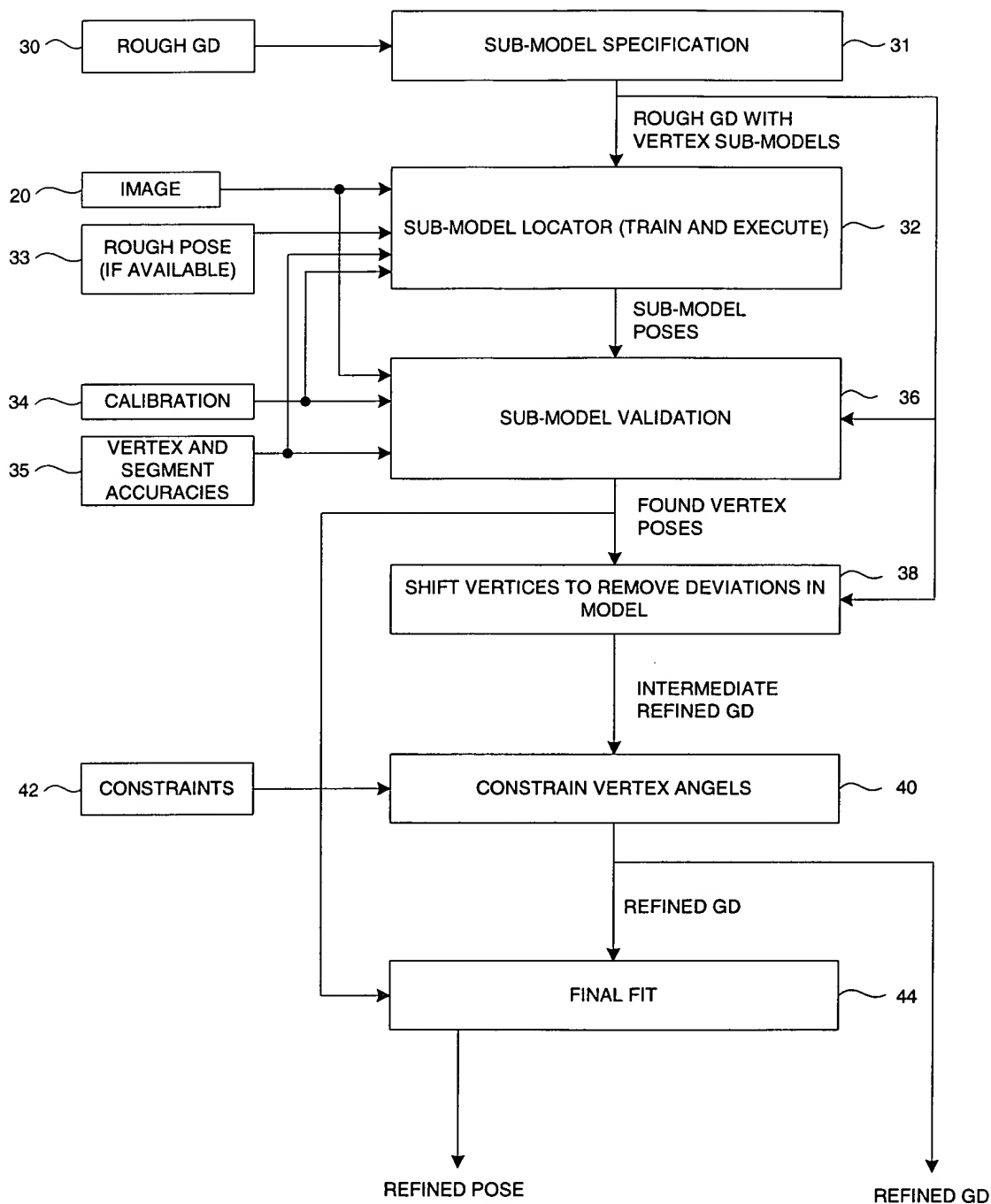


FIG. 3

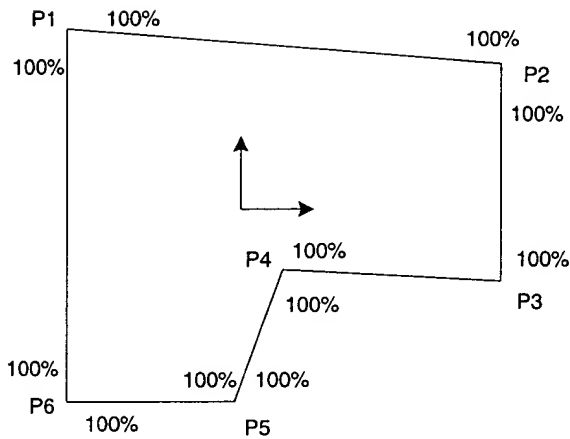
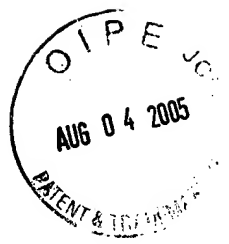


FIG. 4A

LABEL	POSE OF SUB-MODEL COORDINATE FRAME IN FULL MODEL REFERENCE FRAME	STORAGE
1	TRANS = (P1), ANGLE = A6	
2	TRANS = (P2), ANGLE = A1	
3	TRANS = (P3), ANGLE = A2	
4	TRANS = (P4), ANGLE = A3	
5	TRANS = (P5), ANGLE = A4	
6	TRANS = (P6), ANGLE = A5	

MODEL STORAGE:
NORMALIZED MODELS IMAGE SEARCH MODELS

	COGNEX PATQUICK MODEL
	COGNEX PATMAX MODEL
	COGNEX PATMAX MODEL
	COGNEX PATMAX MODEL
	COGNEX PATMAX MODEL
	COGNEX PATMAX MODEL
	COGNEX PATMAX MODEL

FIG. 4B